



State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

June 29, 2006

CERTIFIED RETURN RECEIPT
7004 2510 0004 1824 5018

Jim Runquist
4526 Ridgeview Drive
Eagan, Minnesota 55123

Subject: Initial Review of Notice of Intention to Commence Large Mining Operations,
TME Asphalt Ridge, LLC, Cameron #1 Project, Task #1386, M0470036, Uintah
County, Utah

Dear Mr. Runquist:

The Division has completed its review of your Notice of Intention to Commence Large Mining Operations for the Cameron #1 Project, located in Uintah County, Utah, which was received April 11, 2006. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion and **address only those items requested in the attached technical review** by sending replacement pages of the original mining notice **using redline and strikeout text**. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records. Please provide a response to this review by August 1, 2006.

If you have any questions in this regard please contact me or Paul Baker of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

Susan M. White
Mining Program Coordinator
Minerals Regulatory Program

SMW:PBB:pb
Attachment: Review
P:\GROUPS\MINERALS\WP\M047-Uintah\M0470036-Cameron\Final\05002006-firstrev.doc

REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

**TME Asphalt Ridge, LLC
Cameron #1 Project**

**M0470036
June 23, 2006**

R647-4-104 – Operator's, Surface and Mineral Ownership

The application indicates that the Department of Natural Resources, Division of Oil, Gas & Mining are adjacent landowners.

The Division does not own any lands; please correct this statement. (DJ)

In Section I 8, the application says the Utah State Lease Number is 5.047.036. This section is intended for applicants having leases with the Utah School and Institutional Trust Lands Administration (SITLA), and it appears the number included is Oil, Gas and Mining's former permit number (S/047/036). As far as the Division is aware, there is no Utah State Lease Number. Please make this correction. (PBB)

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Figure 1 shows that the existing power line extends into the plant site area.

Will reclamation of this power line extension be TME's responsibility? If so please include a line in the surety for the removal of this additional line. (DJ)

Figure 1 shows the location of the overburden and tail storage.

Please show the location of the topsoil storage area on this Figure. (DJ)

The submittal describes a 3000 foot road that accesses the site.

For surety estimation purposes, please state the width of this road and how it is constructed (paved, gravel, etc.). (DJ)

Figure 6 indicates that the scale of the map is 1"=100'. Utilizing that scale, the haul/loadout road shown on the map as 40' in width only measures to be 30' wide.

Figure 8 indicates that this loadout area will be 5.5 acres.

Utilizing the scale shown on Figure 6 the area only encompasses about 3.3 acres.

Please correct these maps to coordinate the text with the size of the features shown on the map. (DJ)

Figure 7 shows a "Typical Holding Pond".

Please show the locations of these ponds, and for surety estimate purposes, please state the size of each. (DJ)

R647-4-106 - Operation Plan

- 106.2 Type of operations conducted, mining method, processing etc.
The plan states that the mined material is to be crushed, screened and agglomerated before it is shipped to the process area.
None of the maps included in the application indicates the location of the crushing area. Please show the location of this crushing facility and include the cost for removal in the reclamation surety estimate. (DJ)
- 106.3 Nature of materials mined, waste and estimated tonnages
The application indicates that all overburden and tails from the initial pit will be placed on the 18.5 acre "overburden/tails storage area."
If mining removes the entire average depth of the mineral deposit in phase 1, the pile in this area will be in excess of 100' high. Please show an activity in the surety estimate for reclaiming this area. (DJ)
- 106.4 Existing soil types, location, amount
The depth of the soil at the site is estimated to be between 0 to 4 inches.
The application shows a volume of soil to be stockpiled as 1,044,000 cy which would result in an average depth of over eight feet over the entire site (78.8 acres). Please review this estimate and correct the total to be stockpiled as necessary. (DJ and PBB)
- Soils in much of the area proposed for disturbance have high clay and salt contents; however, according to the soil survey report, about 15 percent of the area has other soil types. Soil quality is vitally important for reclamation in this area as demonstrated by reclaimed areas with essentially no growth compared to others that are nearly indistinguishable from undisturbed areas. In general, the better quality soils have more sand and less clay. (PBB)
- Please include in the plan either: 1. Detailed maps showing where more desirable soils are located, or, 2. A commitment for a soil scientist or geologist familiar with soils to mark areas where more desirable soils are located. Salvage operations should then be conducted to salvage as much as possible of the more desirable soils and to stockpile them separately from the badland/rock outcrop soils. (PBB)
- 106.5 Plan for protecting & redepositing soils
The soil noted to be harvested over the 50.4 acre site is shown in the plan to be 8,600 cy. If the soils only averaged 2" over this area the total soil harvested would be 13,550 cy. Please explain how the figure of 8600 cy was arrived at. (DJ)
- The total disturbed area as shown on Figure 8 is 78.8 acres. Is there a reason soil would only be salvaged from 50.4 acres? If not, please commit to salvage soil from the entire area to be disturbed. (PBB)
- The plan says in Section 106.9 that only 0.033 percent of the material on the surface can be classified as topsoil. Is this statement affirmed by soil survey information, and is it significant for the plan? (PBB)

Section 106.9 of the plan says topsoil piles will be seeded to prevent erosion. Please provide further details of the interim revegetation plan. The piles should be left in a roughened condition and seeded in the fall as soon as possible after surface preparation. The plan needs to include the seed mix that would be used. (PBB)

Page 17 of the plan says sediment will be removed from sediment control structures and used for reclamation or other purposes. The sediment may be useful for reclamation, but it may also be detrimental. This material should be tested for parameters like oil and grease, electrical conductivity, and texture before being used as a growth medium. Please include this commitment. (PBB)

106.7 Existing vegetation - species and amount

The plan needs to include vegetation information sufficient to establish revegetation cover standards. It should include vegetation cover data by species for plant communities that would be disturbed by the mine. (PBB)

106.8 Depth to groundwater, extent of overburden, geology

The plan indicates that material from the holding/settling will be checked and made environmentally friendly.

What is the process involved in making this material "environmentally friendly"? (DJ)

106.9 Location & size of ore, waste, tailings, ponds

The submittal states that the overburden and topsoil stockpiles will be located in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$.

The SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ is not shown in Section 5 of the permit application as a part of the area to be disturbed. Please correct the plan as necessary. (DJ)

The submittal states that the material from the settling ponds will be disposed of. Please state in the plan where this material will be disposed of. (DJ)

The plan indicates where the overburden and tailings will be stored but does not show any topsoil piles.

Please show the location of topsoil piles on a surface facilities map. (DJ)

The plan states that there will be no material from the mining operations that will not be used in the reclamation process.

Does this mean that all the material placed in the overburden/tailings area will be placed back into the mined out area when the site is reclaimed. (DJ)

The submittal states that the capacity of the dumps will increase during initial stages of mining and will attain an average of 522,000 cu yds of material per year and will remain static until needed for reclamation.

Section 106.4 of the plan states that the first year a total of 522,000 cu yds of overburden will be placed in the dump area in addition to tailings from 2,534,000 cu yds of processed material. Please review this statement and make changes as needed. (DJ)

R647-4-107 - Operation Practices

107.2 Drainages to minimize damage

The plan identifies the treatment styles and plans to treat and contain contaminated water, surface runoff, and groundwater, but fails to give the specifics of exactly where these facilities will be located within the project area. Without the specifics regarding location of treatment facilities and amounts of treated water, the Division is unable to assess the impacts associated with the operation. Please provide specifics and locations of all treatments, processes and facilities, including the location and size of ditches, culverts, ponds and other details related to treatment of water. (TM)

107.3 Erosion control & sediment control

The information in the plan addresses erosion and sediment control. In theory, the treatment methods should work. Please provide a map showing where the facilities to treat erosion will be located. (TM)

Under the storm water permit it is stated that a storm water permit would not be needed "provided the mining operations do not cause water to be discharged from the parcels to waters of the state or to off-site properties."

Sections 106.8, 106.9, 107.0, 109.1, & 110.2 all indicate that waters will be released from the site. Please explain why this site does not require a UPDES permit. (DJ)

107.4 Deleterious material safely stored or removed

The plan states that the tailings from the plant are to be placed in the stockpile/tailings area.

Will there be any residual effluents left in this material that may have to be collected and tested before it is allowed to leave the site? (DJ)

The submittal states that the material from the mine may be piped to the process area. What will be mixed with this material to allow it to be moved to the plant through a pipeline? Where will this pipeline be located? Please show the probable location on a surface facilities map. (DJ)

The plan notes that water will be transported to the site from the river. Please state in the plan how the water will be moved from the river to the site. (DJ)

The plan indicates that water and material from the plant site areas will be collected in holding tanks or ponds prior to disposal.

Please show the location of these areas on a surface facilities map. (DJ)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems

Please provide information about the quality and quantity of surface and groundwater. This information must be presented before an assessment of the quality and quantity of surface and ground water can be made and the impacts to the natural systems be determined in conjunction with the operations plan. (TM)

A retaining dam has been noted to be constructed in dry channels around the site. Please show the location of the retaining dam on a surface facilities map. (DJ)

109.3 Impacts on existing soils resources

TME's letter to the Division of Water Quality indicates that the process area will be totally enclosed by containment berms and have a suitable base to prevent process waters from reaching ground water.

Please indicate the material that will be used for this base and what the ground preparation of this area will be. (DJ)

The letter also states that the "tank battery" will be constructed with a berm enclosing a containment area.

Will there be any surface preparation of the area within the tank battery? Please include these details in the plan. (DJ)

R647-4-110 - Reclamation Plan

110.1 Current & post mining land use

The application says the land has no viable use and that it has been used in the past as a source for asphalt paving. Although much of the area has been previously mined, it is being used for wildlife habitat and livestock grazing. The stream running through the area and its associated riparian area provide valuable wildlife habitat. Please alter the plan accordingly. (PBB)

The application needs to state to what land use the land would be reclaimed. (PBB)

110.2 Description of facilities to be left (post mining use)

The plan states that the surface facilities will become the property of the landowner and will be disposed of or remain on site at his discretion.

Unless the permit is transferred to the landowner and he accepts responsibility for the reclamation of the site, the facilities will need to be removed. (DJ)

110.5 Revegetation planting program

Page 17 of the plan says natural revegetation will be encouraged, and it appears this statement applies to the overburden and possibly topsoil stockpiles. Natural revegetation is likely to be weeds. Overburden stockpiles that are undisturbed for more than a year should be seeded with an interim seed mix, such as barley, to reduce weed establishment. (PBB)

The application includes a seed mix with four species, but it is possible other species might be included in this mix depending on the outcome of vegetation sampling. (PBB)

Please provide further details of the revegetation plan, including surface preparation methods, seeding methods, and timing of revegetation. The surface should be prepared so it is extremely rough while still allowing as much soil as possible to remain on the surface. The site could be drill or broadcast seeded, but to retain roughness, broadcast seeding is recommended. Surface preparation should be timed so the site can be seeded immediately after surface preparation in the fall. (PBB)

R647-4-111 - Reclamation Practices

111.1 Public safety & welfare

1.15 Constructing berms/fences above highwalls

The plan indicates that highwalls will be formed during mining.

These features will need to be fenced or bermed during operations to protect the public.

Please show the location of these berms or fences on a surface facilities map.
(DJ)

111.2 Reclamation of natural channels

Where will the natural channels be located and how will they be constructed? (TM)

111.9 Dams & impoundments left self draining & stable

Will all impoundments be removed and filled in upon closure? (TM)

R647-4-112 – Variance

The plan requests a variance from NPDES requirements, but this is not within the Division's authority. Please see the discussion under Section 107.3 of this review. (PBB)

From: Paul Baker
To: Berry, Penny
Date: 6/23/2006 1:48:39 PM
Subject: Lexco Letter and TME Review

There's a letter to Lexco concerning the Cottonwood Mine. It's in the draft folder (Uintah county) as a deficiency document. Would you please finalize it?

There's also a review of Temple Mountain Energy's plan for the Cameron Mine (M0470036). Would you please finalize this one, also? Thank you.